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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,121	07/24/2001	Tim Goldstein	10007822-1	4459

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

QUINONES, ISMAEL C

ART UNIT	PAPER NUMBER
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2686

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DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,121

Applicant(s)

GOLDSTEIN, TIM

Examiner

Ismael Quiñones

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Both information disclosure statements (IDS) submitted on July 24, 2001 have being considered by the examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 3, 5-8, 10-18, 20-21, and 23** are rejected under 35 U.S.C. 102(b) as being anticipated by Grube et al. (U.S Pat. No. 5,666,661).

Regarding **claim 1**, Grube et al. disclose a cellular apparatus, comprising: an antenna (Wherein the communication devices “transceive” or transmit and receive communications through an antenna; *col. lines 57-60; Figure 1, items 102 and 103*); and control logic configured to monitor cellular signals detected by said antenna (Control logic such as means for changing communications modes based on the distance relationship between cellular devices or communication units; *col. 3, line 56 thru col. 4, line 9*), said cellular signals transmitted from cellular devices and identifying said cellular devices (Wherein communication units or cellular devices initiate a communication by

transmitting an identification code; *col. 2, lines 44-47; Fig. 1, item 120*), said control logic further configured to receive a request to transmit to a remote cellular device and to make a determination , in response to said request, as to whether said remote cellular device is identified by one of said cellular signals detected by said antenna (Wherein the cellular apparatus or target unit receive a request for initiating communications within a communication system that comprise the resources for determining alternating modes of communication such as direct or assisted mode, subsequently wherein a determination is made based on a distance between cellular devices, such distance dependent upon an identification such as the cellular devices geographic locations; *col. 2, lines 44-56; col. 3, line 62 thru col. 4, line 9*), said control logic further configured to transmit a cellular signal based on said determination (Wherein the cellular apparatus transmits an acknowledgement to the identified cellular device, further proceeding to select a communication operation mode such as direct or assisted; *col. 4, lines 3-10*).

Regarding **claim 3**, and as applied to claim 1, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to transmit a service request signal to a cellular tower (Wherein a communication unit such as a cellular apparatus transmits a communication request to a communication resource such as a cellular tower; *col. 1, lines 23-29*).

Regarding **claim 5**, and as applied to claim 1, Grube et al. disclose the aforementioned apparatus, wherein said control logic is further configured to define said cellular signal such that, if said control logic determines in said determination that said remote cellular device is identified by one of said signals detected by said antenna, any

cellular tower that receives said cellular signal ignores said cellular signal (Utilizing identifiers such as the geographic locations of a cellular apparatus and cellular devices to make a determination on whether maintain a current assisted communication mode or change to a direct mode of communications between the cellular apparatus and a cellular device, in which a direct mode of communication implies ignoring the system cellular tower or communication resource; *col. 3, lines 39-45*).

Regarding **claim 6**, and as applied to claim 1, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to define said cellular signal transmitted by control logic such that, if said control logic determines in said determination that said remote device is identified by one of said cellular signals detected by said antenna, said remote cellular device is responsive to said cellular signal transmitted by said control logic (Wherein an acknowledgement is transmitted by the cellular apparatus based on affirmative direct mode operation, and once it is received by a communication unit or cellular device, the cellular device being responsive by proceeding to a direct communication mode; *col. 4, lines 3-9*).

Regarding **claim 7**, and as applied to claim 6, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to define said cellular signal transmitted by said control logic such that, if said control logic determines in said determination that said remote cellular device is not identified by one of said cellular signals detected by said antenna, a cellular tower is responsive to said cellular signal transmitted by said control logic (The cellular tower or communication resource being

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responsive by maintaining a system communication resource mode if not affirmative direct mode operation is met; *col. 2, lines 15-30; col. 3, line 64 thru col. 4, line 2*).

Regarding **claim 8**, Grube et al. disclose a cellular apparatus for transmitting cellular signals, comprising: an antenna (Wherein the communication units “transceive” or transmit and receive communications through an antenna; *col. lines 57-60; Figure 1, items 102 and 103*); and control logic configured to transmit, via said antenna, a cellular signal that identifies a remote cellular device (Wherein communication units or cellular devices initiate a communication by transmitting an identification code; *col. 2, lines 44-47; Fig. 1, item 120; col. 1, lines 22-30*), said control logic further configured to make a determination as to whether said remote cellular device is within a transmission range of said apparatus and to define said cellular signal based on said determination (Wherein the cellular apparatus or target unit receive a request for initiating communications within a communication system that comprise the resources for determining alternating modes of communication such as direct or assisted mode, subsequently wherein a determination is made based on a distance between cellular devices, such distance estimated upon the cellular devices geographic locations, consequently comparing such distance with a predetermined threshold and if such distance is favorable a direct communication mode is chosen; *col. 2, 15-30 and lines 44-56; col. 3, line 54 thru col. 4, line 9*).

Regarding **claim 10**, and as applied to claim 8, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to transmit a service request signal to a cellular tower (Wherein a communication unit such as a cellular

apparatus transmits a communication request to a communication resource such as a cellular tower; *col. 1, lines 23-29*).

Regarding **claim 11**, and as applied to claim 8, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to detect whether said apparatus has received a cellular signal transmitted from said remote cellular device and to make said determination based on whether said control logic has detected said cellular signal transmitted from said remote cellular device (Wherein the communication units both being the cellular apparatus and the cellular device comprise means for detecting received signals in either party, subsequently both parties receiving a direct communication mode message based on a predetermined threshold criteria, acknowledging operation mode, and then proceeding to an action of establishing said direct communication mode; *col. 2, lines 53-67; col. 3, line 53 thru col. 4, line 9; Fig. 1, item 122; Fig. 2, steps 204-207; Fig. 3, steps 302-307*).

Regarding **claim 12**, and as applied to claim 8, Grube et al. discloses the aforementioned apparatus, wherein said control logic is configured to transmit said cellular signal directly to said remote cellular device, if said control logic determines in said determination that said remote cellular device is within said transmission range (A direct communication mode is selected based upon a determination that comprises a predetermined threshold criteria, such criteria relaying upon a favorable transmission distance between a cellular apparatus and a remote cellular device; *col. 2, lines 53-67; col. 3, lines 29-34; col. 3, line 53 thru col. 4, line 9; Fig. 1, item 122; Fig. 2, steps 204-207; Fig. 3, steps 302-307*).

Regarding **claim 14**, and as applied to claim 8, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to define said cellular signal such that a cellular tower is responsive to said cellular signal, if said control logic determines in said determination that said remote cellular device is not within said transmission range (The cellular tower or communication resource being responsive by maintaining a system communication resource mode or assisted mode if the distance between a cellular apparatus and cellular device is not favorable for establishing a direct communication mode determined upon a predetermined threshold; *col. 2, line 15-30; col. 3, line 64 thru col. 4, line 2; Fig. 3, steps 303-304*).

Regarding **claim 15**, and as applied to claim 14, Grube et al. disclose the aforementioned apparatus, wherein said control logic is configured to define said cellular signal such that said cellular tower is non-responsive to said cellular signal, if said control logic determines in said determination that said remote cellular device is within said transmission range (Once the direct communication mode of operation is established, the communication units resign communications with the system resources, therefore the communication resource response depends upon a not favorable predetermined threshold; *col. 2, line 15-30; col. 3, line 64 thru col. 4, line 2; Fig. 3, steps 303-304*).

Regarding **claim 16**, Grube et al. disclose a cellular transmission method, comprising the steps of monitoring cellular signals received by a cellular communication apparatus (Wherein the cellular apparatus receive signals from the system resources or from cellular devices through an antenna; *col. lines 57-60; Figure 1, items 102 and 103*), identifying a plurality of remote cellular communication devices based on said cellular

signals monitored in said monitoring step (Wherein communication units or cellular devices initiate a communication by transmitting an identification code; *col. 2, lines 44-47; Fig. 1, item 120*), detecting a transmission request at said cellular communication apparatus, determining, in response to said detecting step, whether a remote cellular communication device identified by said transmission request has been identified in said identifying step (Wherein the cellular apparatus or target unit receive a request for initiating communications within a communication system that comprise the resources for determining alternating modes of communication such as direct or assisted mode, subsequently wherein a determination is made based on a distance between cellular devices, such distance dependent upon an identification such as the cellular devices geographic locations; *col. 2, lines 44-56; col. 3, line 62 – col. 4, line 9*); and transmitting, based on said determining step, a cellular signal from said cellular communication apparatus to said remote cellular communication device identified by said transmission request (Wherein the cellular apparatus transmits an acknowledgement to the identified cellular device, further proceeding to select a communication operation mode such as direct or assisted; *col. 4, lines 3-10*).

Regarding **claim 17**, and as applied to claim 16, Grube et al. disclose the aforementioned, further comprising the step of transmitting a request for service signal from said cellular communication apparatus to a cellular tower (Wherein a communication unit such as a cellular apparatus transmits a communication request to a communication resource such as a cellular tower; *col. 1, lines 23-29*).

Regarding **claim 18**, and as applied to claim 17, Grube et al. disclose the aforementioned method, further comprising the step of defining said cellular signal transmitted in said transmitting step such that said cellular tower is non-responsive to said cellular signal (Once the direct communication mode of operation is established, the communication units resign communications with the system resources, therefore the communication resource response depends upon a not favorable predetermined threshold; *col. 2, line 15-30; col. 3, line 64 thru col. 4, line 2; Fig. 3, steps 303-304*).

Regarding **claim 20**, Grube et al. disclose a cellular transmission method, comprising the steps of detecting a transmission request at a cellular communication apparatus (Wherein the communication unit such as a cellular apparatus receive a request for initiating communications within a communication system, and generating a response based upon said request; *col. 2, lines 44-56; col. 3, line 62 – col. 4, line 9*), determining, in response to said detecting step, whether a remote cellular communication device identified by said transmission request is within a transmission range of said cellular communication apparatus (Wherein the cellular apparatus or target unit receive a request for initiating communications within a communication system that comprise the resources for determining alternating modes of communication such as direct or assisted mode, subsequently wherein a determination is made based on a distance between cellular devices, such distance estimated upon the cellular devices geographic locations, consequently comparing such distance with a predetermined threshold and if such distance is favorable a direct communication mode is chosen; *col. 2, 15-30 and lines 44-56; col. 3, line 54 thru col. 4, line 9*); and transmitting a cellular signal from said cellular

communication apparatus to said remote cellular communication device identified by said transmission request (Wherein the communication units both being the cellular apparatus and the cellular device comprise means for detecting received signals in either party, subsequently both parties receiving a direct communication mode message based on a predetermined threshold criteria, acknowledging operation mode, and then proceeding to an action of establishing said direct communication mode; *col. 2, lines 53-67; col. 3, line 53 thru col. 4, line 9; Fig. 1, item 122; Fig. 2, steps 204-207; Fig. 3, steps 302-307*).

Regarding **claim 21**, and as applied to claim 20, Grube et al. disclose the aforementioned method, further comprising the step of transmitting a service request signal from said cellular communication apparatus to a cellular tower (Wherein a communication unit such as a cellular apparatus transmits a communication request to a communication resource such as a cellular tower; *col. 1, lines 23-29*).

Regarding **claim 23**, and as applied to claim 20, Grube et al. disclose the aforementioned method, wherein said determining step includes the step of determining whether said, cellular communication apparatus has received a signal transmitted from said remote cellular communication device (Wherein the communication units both being the cellular apparatus and the cellular device comprise means for detecting received signals in either party, subsequently both parties receiving a direct communication mode message based on a predetermined threshold criteria, acknowledging operation mode, and then proceeding to an action of establishing said direct communication mode; *col. 2, lines 53-67; col. 3, line 53 thru col. 4, line 9; Fig. 1, item 122; Fig. 2, steps 204-207; Fig. 3, steps 302-307*).

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S. Pat. No. 5,666,661)

Regarding **claim 4**, and as applied to claim 1, Grube disclose the aforementioned apparatus comprising control logic configured to monitor cellular signals. Grube et al. fail to clearly specify, wherein said control logic is further configured to include a cellular tower identifier in said cellular signal transmitted by said control logic, if said control logic fails to determine in said determination that said remote cellular device is identified by one of said signals detected by said antenna.

However the examiner takes Official Notice that a cellular tower identifier (*base station ID*) included on a communication unit once said communication unit is registered

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in the communication system, is old and well known in the art of mobile communications.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Grube et al. method for automatically bypassing the use of a communication system infrastructure to include a communication resource ID included on a communication unit once the unit is registered and undergoing communications utilizing the resources provided by the system, for the purpose of allocating resources within the network and the tracking the respective assignments of such resources.

7. **Claims 2, 9, 19, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S Pat. No. 5,666,661) in view of Aarnio (U.S Pat. No. 6,522,889).

Regarding **claim 2**, and as applied to claim 1, Grube et al. discloses the aforementioned apparatus. Grube et al. fail to clearly specify the aforementioned apparatus, further comprising: a lens; and a conversion mechanism configured to convert light received via said lens into digital data, wherein said control logic is configured to include said digital data in said cellular signal transmitted by said control logic.

However in the same field of endeavor, Aarnio et al. discloses a cellular device such as mobile station comprising a lens; and a conversion mechanism configured to convert light received via said lens into digital data, (*See col. 1, lines 46-51; Fig. 1, item 13*) wherein said control logic is configured to include said digital data in said cellular

signal transmitted by said control logic (Wherein the digital data is ultimately conveyed from the cellular device to a communications network, and further analyzed to determine a geographic location; *col. 1, lines 53-54; col. 1, line 65 thru col. 2, line 2; Fig. 3, steps 3.1 – 3.8; Fig. 4, steps 4.1 – 4.9*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Grube et al. cellular device to include features such as lens and a conversion mechanism to convert light received into digital data as taught by Aarnio. For the purpose of transmitting large amounts of data such as image data without using the resources of a system infrastructure such as bandwidth allocation if a cellular apparatus and a remote device are within a favorable short-range communication distance.

Regarding **claim 9**, and as applied to claim 8, Grube et al. in view of Aarnio disclose the aforementioned apparatus. In addition Aarnio disclose wherein said apparatus further comprises: a lens; and a conversion mechanism configured to convert light received via said lens into digital data (*See col. 1, lines 46-51; Fig. 1, item 13*), wherein said control logic is further configured to include said data in said cellular signal (Wherein the digital data is ultimately conveyed from the cellular device to a communications network, and further analyzed to determine a geographic location; *col. 1, lines 53-54; col. 1, line 65 thru col. 2, line 2; Fig. 3, steps 3.1 – 3.8; Fig. 4, steps 4.1 – 4.9*).

Regarding **claim 19**, and as applied to claim 16, Grube et al. in view of Aarnio disclose the aforementioned method. In addition Aarnio disclose said step further

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comprising the steps of: capturing an image via said cellular communication apparatus; defining said image in data (*See col. 1, lines 46-51; Fig. 1, item 13*); and including said data in said cellular signal transmitted in said transmitting step (Wherein the digital data is ultimately conveyed from the cellular device to a communications network, and further analyzed to determine a geographic location; *col. 1, lines 53-54; col. 1, line 65 thru col. 2, line 2; Fig. 3, steps 3.1 – 3.8; Fig. 4, steps 4.1 – 4.9*).

Regarding **claim 22**, and as applied to claim 20, Grube et al. in view of Aarnio disclose the aforementioned method. In addition Aarnio disclose said method further comprising the steps of: capturing an image via said cellular communication apparatus; defining said image in data (*See col. 1, lines 46-51; Fig. 1, item 13*); and including said data in said cellular signal transmitted in said transmitting step (Wherein the digital data is ultimately conveyed from the cellular device to a communications network, and further analyzed to determine a geographic location; *col. 1, lines 53-54; col. 1, line 65 thru col. 2, line 2; Fig. 3, steps 3.1 – 3.8; Fig. 4, steps 4.1 – 4.9*).

8. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S. Pat. No. 5,666,661) in view of Miyake et al. (U.S. Pat. No. 5,903,618).

Regarding **claim 13**, and as applied to claim 8, Grube et al. disclose the aforementioned apparatus. Grube et al. fail to clearly specify, wherein said remote cellular device, based on said cellular signal, is configured to interface, with a user of said remote cellular device, data included in said cellular signal.

However in the same field of endeavor, Miyake et al. disclose a cellular device based on a cellular signal, is configured to interface, with a user of said remote cellular device, data included in said cellular signal (*See col. 6, lines 38-40; col. 9, lines 31- 42; Fig. 3, items 52, 54, and 56*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Grube et al. cellular device configured to interface with a user as taught by Miyake et al. For the purpose of interacting and alerting the user of the current state of communications applied on the cellular device.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Miyake et al. (U.S. Pat. No. 6,678,341)
- b. Hayes, Jr. et al. (U.S. Pat. No. 6,295,448)

10. Any response to this Office Action should be **faxed to** (703) 872-9306 or **mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to

Crystal Park II
2021 Crystal Drive
Arlington, VA 22202
Sixth Floor (Receptionist)

11. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

12. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q.

February 11, 2004

Marsha D Banks-Harold
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